

Regulatory Information Conference 2001

Deregulation Session W13

CONSOLIDATION IN THE NUCLEAR ENERGY BUSINESS

Richard J. Myers

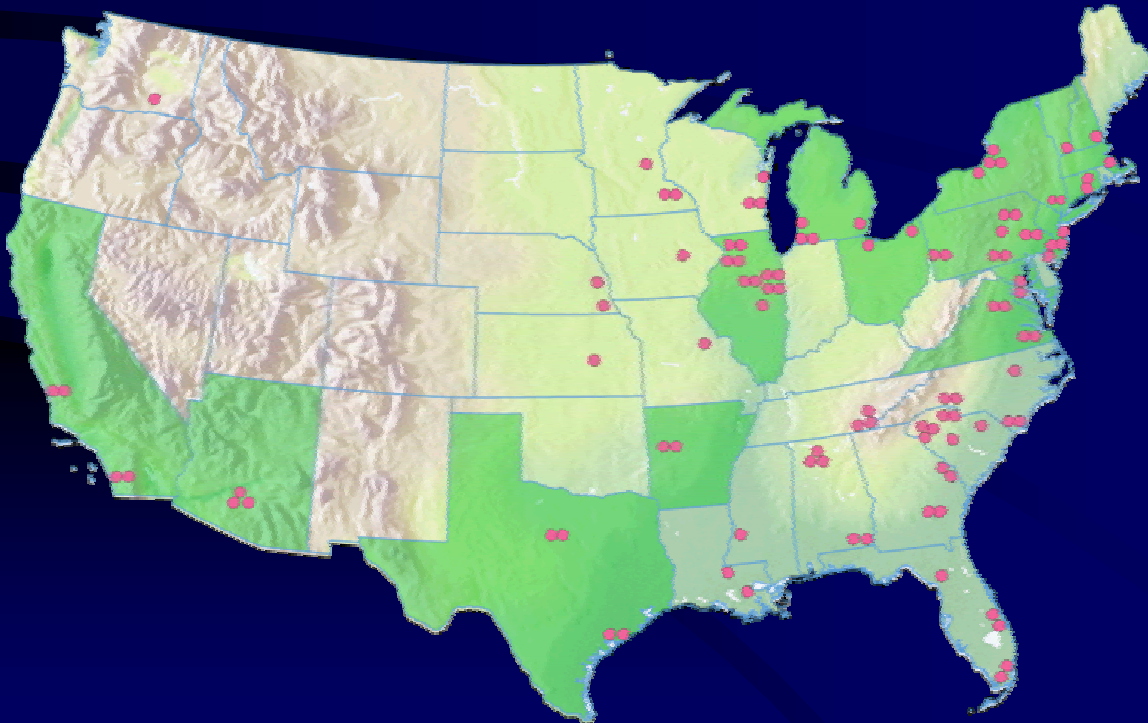
Senior Director, Business Policy

Nuclear Energy Institute

March 14, 2001

Restructuring Status

- ▶ 25 states and D.C. have restructured their electric power industry
- ▶ 16 of those states have operating nuclear plants (60 units)

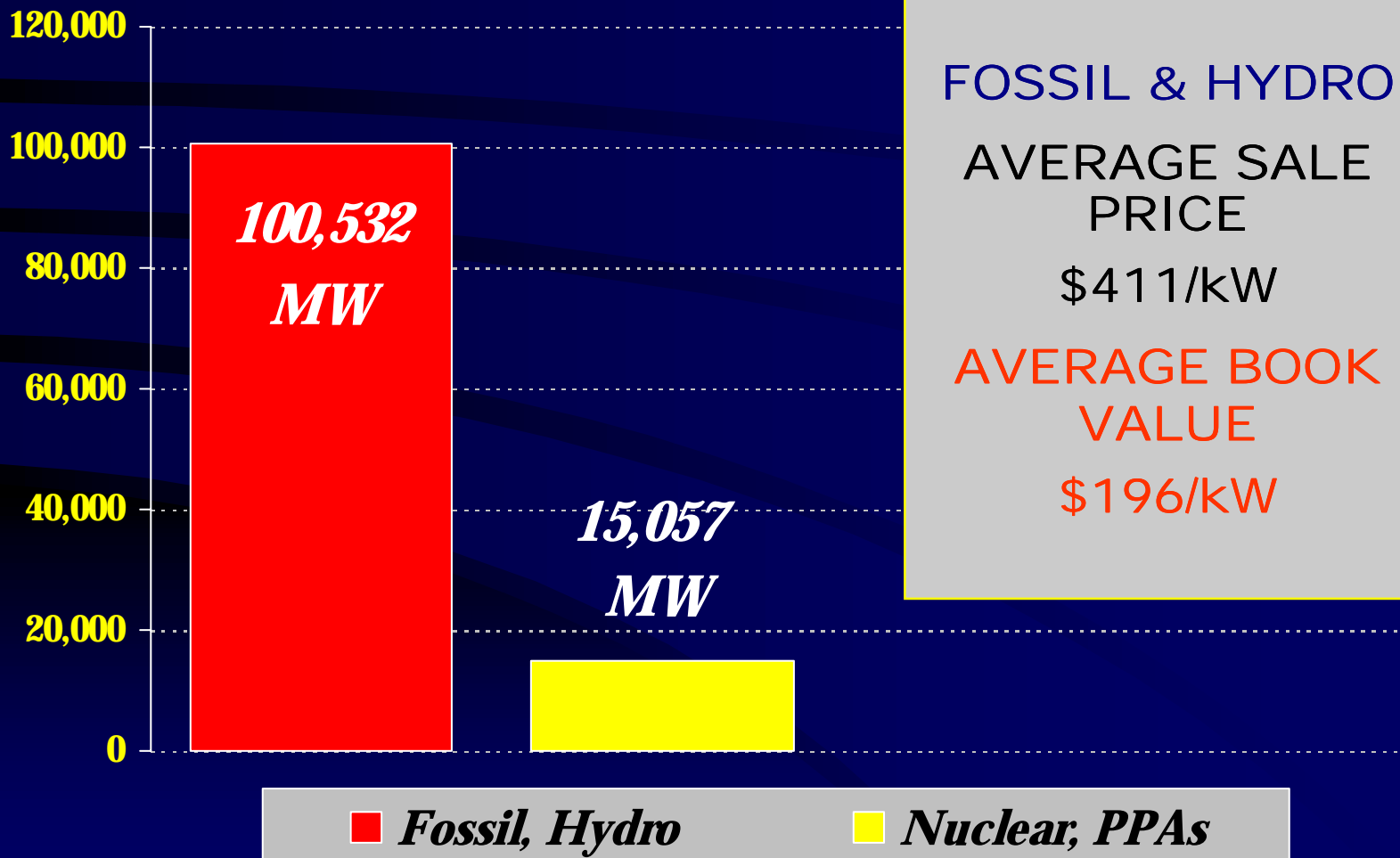


Electric Industry Consolidation

- ▶ Since 1992, 91 mergers/acquisitions announced by investor-owned utilities:
 - *66 completed*
 - *14 withdrawn*
 - *11 pending*

Divestiture of Generation

1996-February 2001

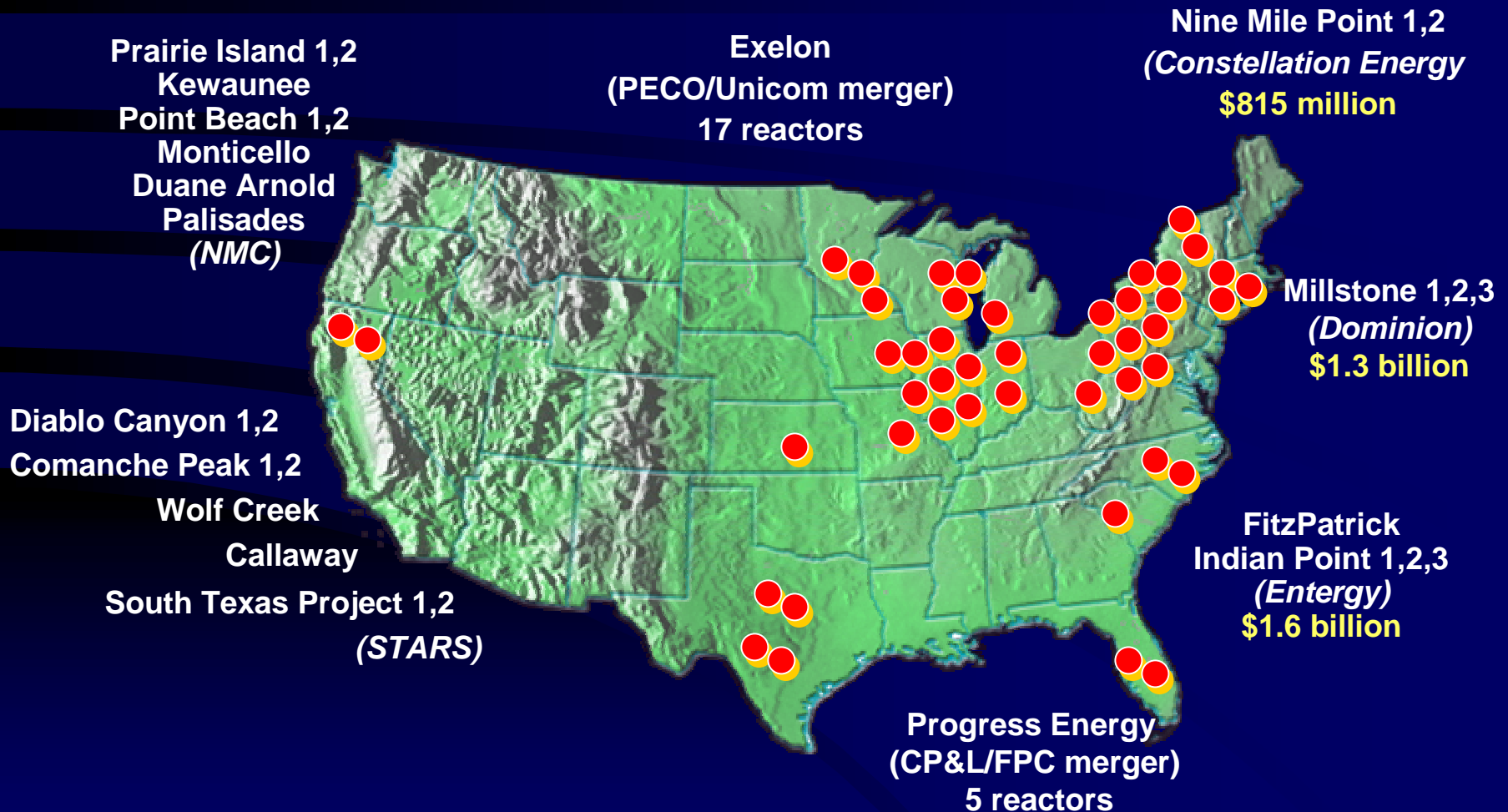


Restructuring And Nuclear Energy: Generally Positive Outcome

State restructuring ...

- ▶ Opportunity to recover stranded costs
- ▶ Continued collection of decommissioning costs
- ▶ Incentives to divest generation = nuclear consolidation

Industry Consolidation Continued in 2000



Nuclear Consolidation: The Bottom Line

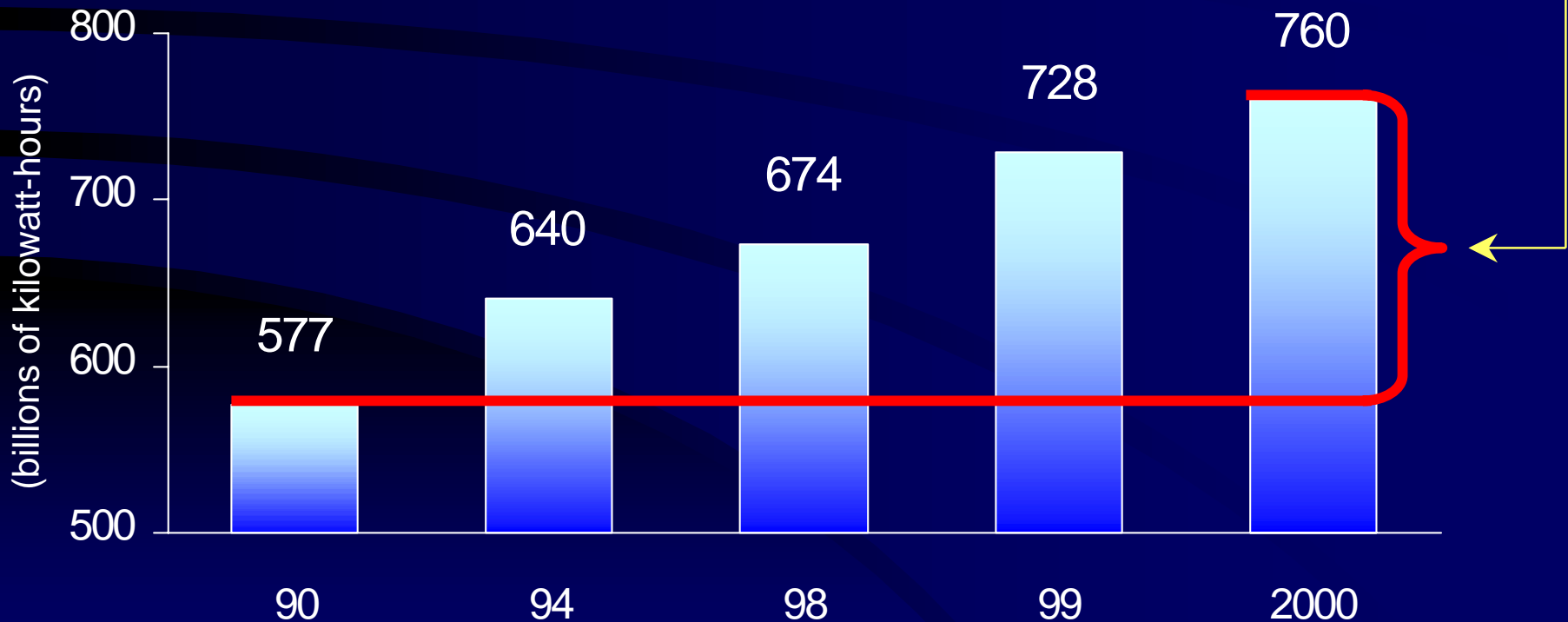
- ▶ Natural business response to competitive market and state restructuring
- ▶ Creating large generating companies with nuclear power as core business
- ▶ Occurring in all industry sectors:
 - Nuclear plant ownership, operating responsibility
 - Infrastructure (equipment, services, fuel supply)
- ▶ Result: safer, stronger, leaner industry going forward

Industry Capacity Factor Reaches All-Time High



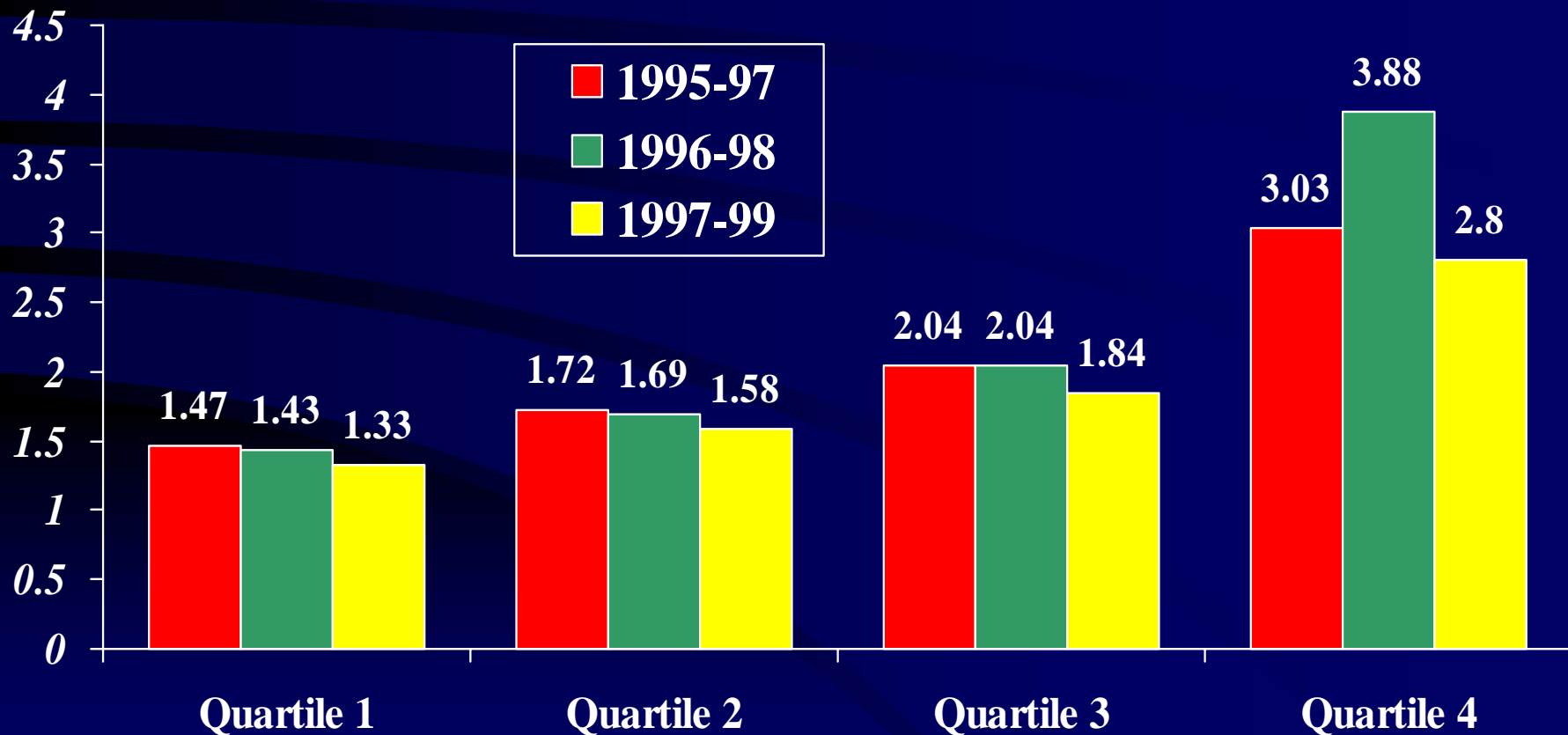
Nuclear Plant Output: Growth During the 1990s

- ▶ Equivalent to 23 1,000-megawatt power plants
- ▶ Satisfied approximately 30% of growth in U.S. electricity demand



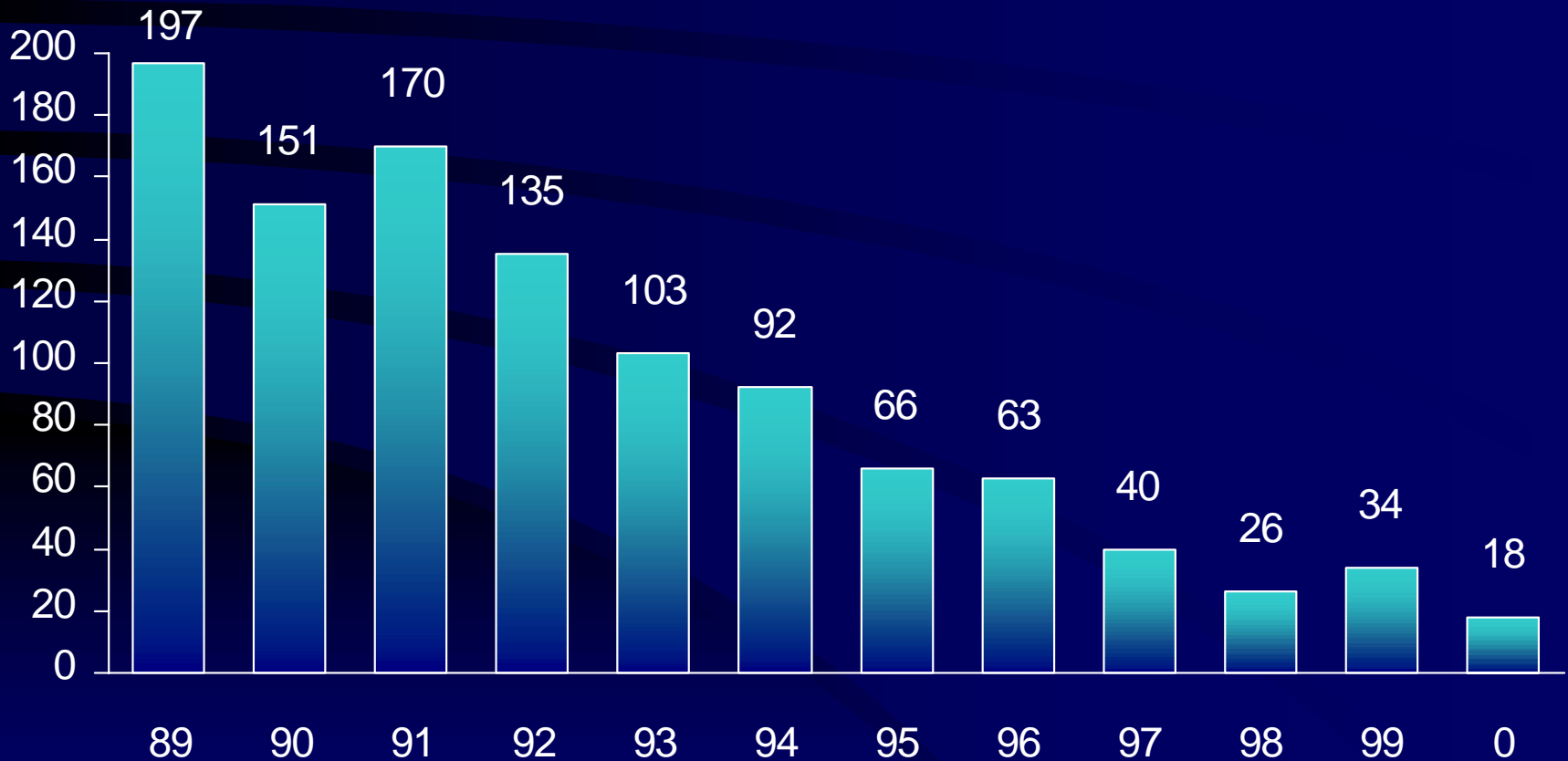
Economic Performance: Consistent Improvement

*(3-year rolling average production costs in
cents per kilowatt-hour)*



Steady Improvement in Safety

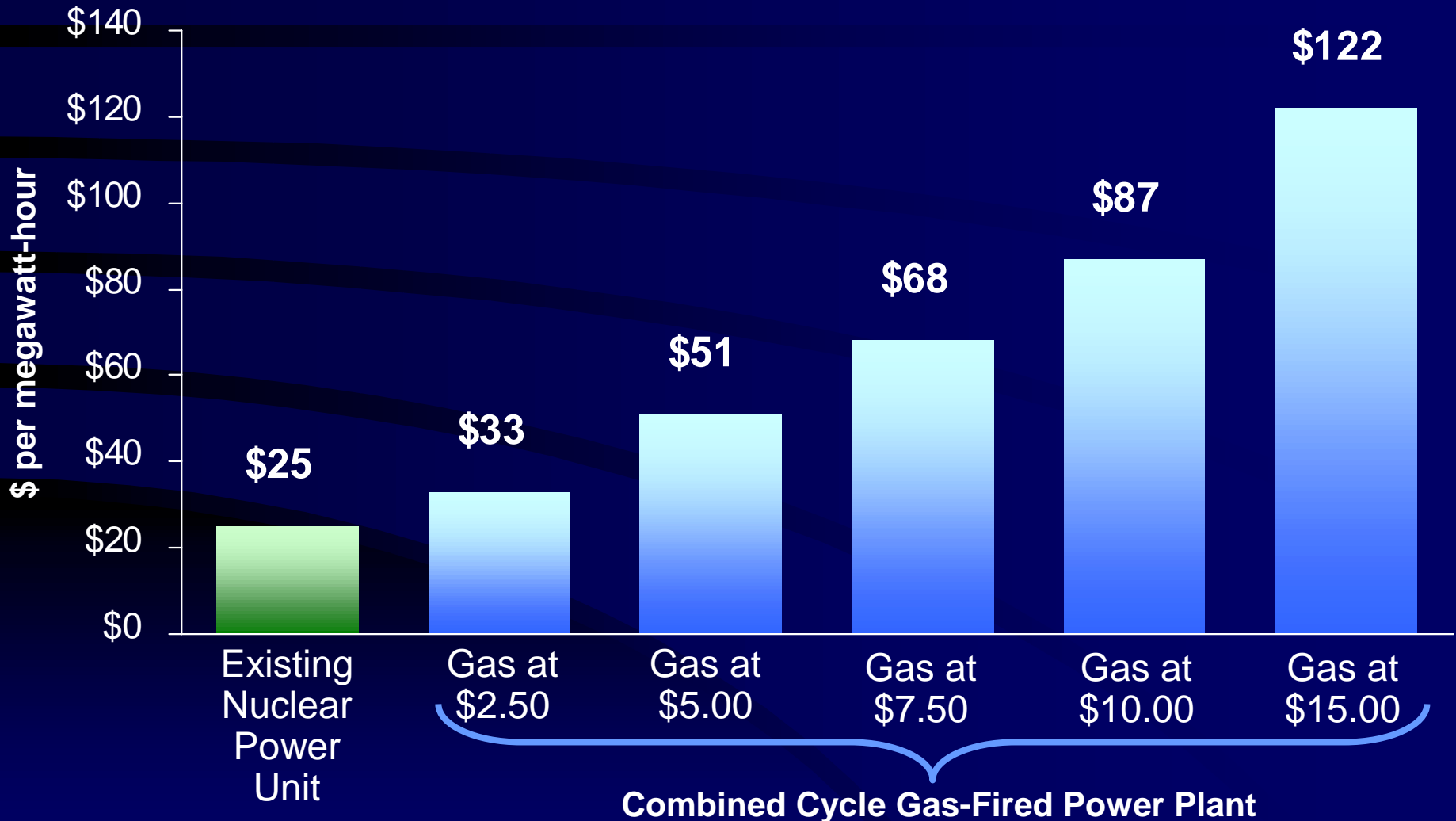
(Number of Unusual Events Reported to NRC)



Nuclear Power Plants in Competitive Markets

- ▶ Electricity business ...
 - *significant price and supply volatility*
 - *massive uncertainty over clean air requirements*
- ▶ Business climate reinforces value of existing nuclear plants ...
 - ▶ *hedge against fossil fuel price/supply fluctuations*
 - ▶ *safeguard against escalating environmental requirements*
- ▶ Business conditions justify serious planning for new nuclear plant construction in U.S.

Rising Gas Prices = Dramatic Impact on Electricity Cost

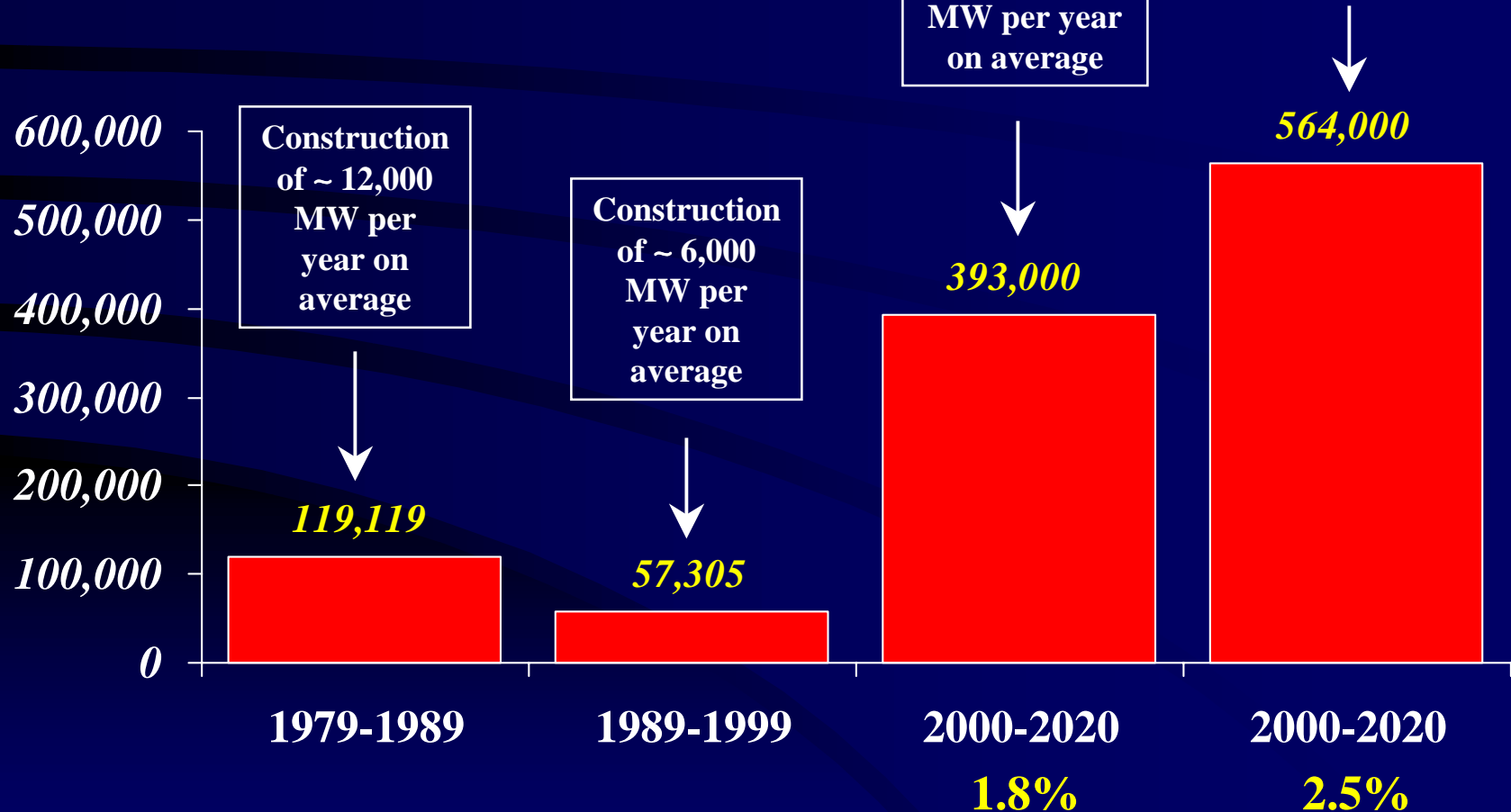


The Rationale for New Nuclear Power Plants

- ▶ Growing electricity demand, need for new generating capacity
- ▶ Greater certainty in the licensing process
- ▶ Economics of new nuclear power plants are improving
- ▶ Industry consolidation = companies large enough to undertake large capital projects
- ▶ Significant political support

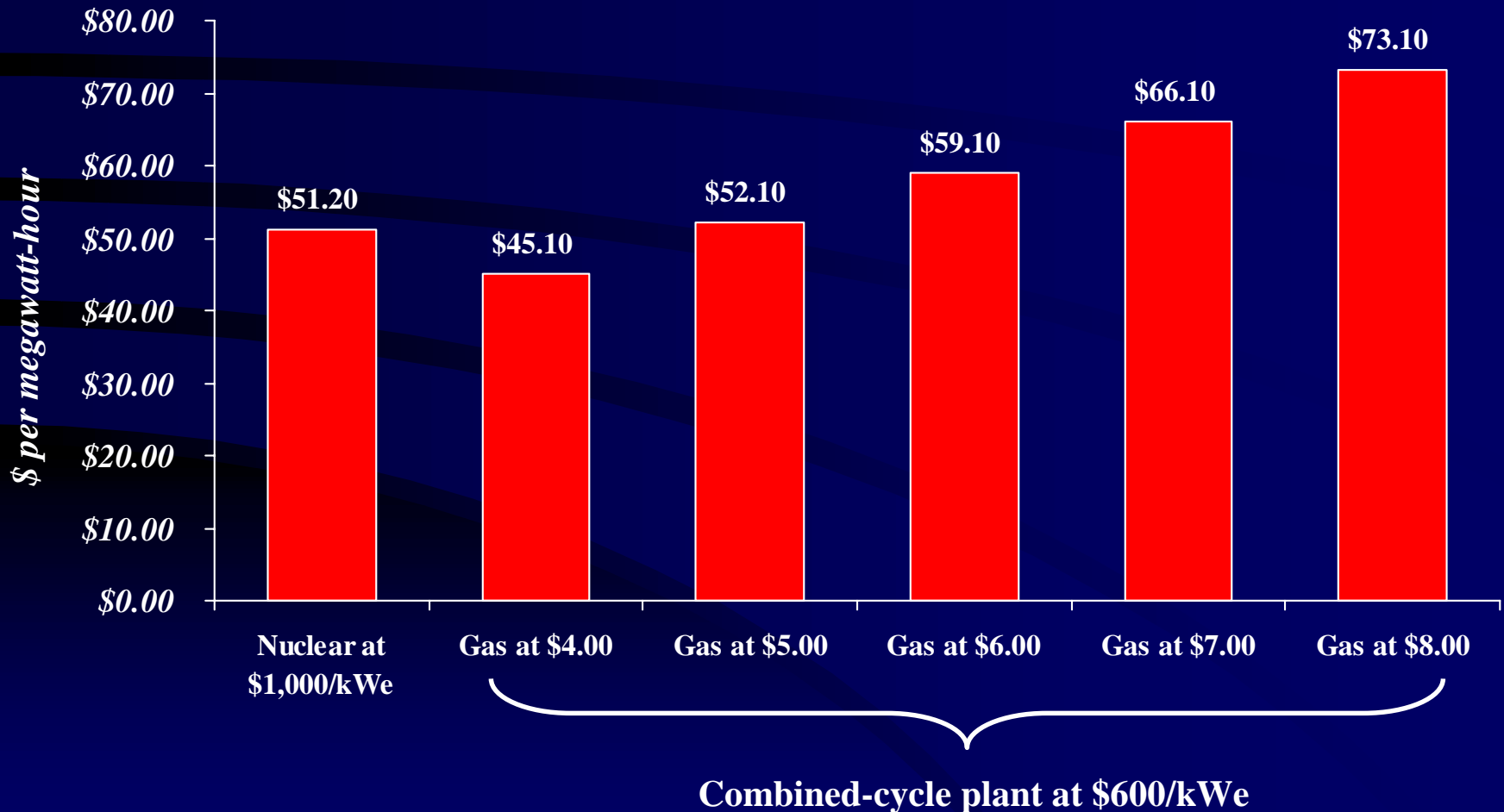
Generating Capacity Additions: Past and Future

Thousands of Megawatts



Source: Energy Information Administration

New Nuclear Power Plants: Competitive Position @ \$1,000/kWe (First Year Electricity Cost in 2006 \$)



U.S. Nuclear Generators: Joining the Top 50

Company	Market Cap. (billion \$)	End-2000 Rank	End-1999 Rank
Enron	64.4	5	9
Duke Energy	31.8	14	22
AES	25.4	17	28
Exelon	22.4	18	N/A
Southern	21.6	19	26
Dynegy	18.1	23	N/A
Dominion	15.9	31	N/A
AEP	15.0	33	N/A
FPL Group *	12.7	39	N/A
Calpine	12.7	40	N/A
Reliant	12.3	42	N/A
TXU	11.4	45	41
PSEG	10.4	49	N/A

** If the FPL/Entergy merger had been consummated at year-end 2000, the merged company's market capitalization would have been \$21.8 billion.*

New Nuclear Plants: Near-Term Activities

- ▶ Improve certainty of new licensing process
- ▶ Start licensing process to “bank” sites
- ▶ Begin NRC review of AP-1000
- ▶ Implement strategy to deploy Pebble Bed Modular Reactor

Consolidation: Necessary Steps

Late 1990s
103 Units ... ~40 Operators ... ~100 Owners



- ▶ **Revise rules on financial qualifications**
- ▶ **Revise rules on decommissioning funding assurance**
- ▶ **License transfers: efficient process , timely decisions**
- ▶ **Disciplined licensing board proceedings**



Consolidation Into
Nuclear Generating Companies,
Nuclear Operating Companies

New Nuclear Power Plants: Necessary Steps

- ▶ Decommissioning funding assurance
- ▶ Financial qualifications
- ▶ Modular reactors
 - *Price-Anderson secondary protection*
 - *NRC license fees*
- ▶ NRC antitrust role
- ▶ Tax treatment of decommissioning funds